

CHAPTER 105  
ORGANIC MATERIALS COMPOSTING FACILITIES

**567—105.1(455B,455D) General.** This chapter shall apply to the composting of solid and yard wastes. Composting facilities may include vermicomposting, turned windrows, aerated static piles, aerated in-vessel systems, or other methods approved by the department. Composting facilities existing as of June 19, 2002, must comply with the requirements of this chapter within two years or by the permit renewal date, whichever is later.

**105.1(1) Definitions.** For the purposes of this chapter, the following definitions apply:

*“Agricultural waste”* means organic materials normally discarded during the production of plants and animals from agronomic, horticultural or silvicultural operations. *“Agricultural waste”* includes but is not limited to manure, crop residuals, bedding, and other vegetative by-products produced during farm processing. Dead animals are not included.

*“Best management practices”* means the practices described in the most recent version of the Compost Facility Operating Guide published by the United States Composting Council or other best management practices as approved by the department.

*“Bulking agent”* means a material that contributes structure and porosity, usually a dry, rigid material such as shredded wood or tire chips.

*“Compostable”* means an organic material that undergoes degradation by biological processes during composting to yield carbon dioxide, water, inorganic compounds and biomass.

*“Compostable plastics”* means a plastic that undergoes degradation by biological processes at a rate consistent with other known compostable materials and leaves no visually distinguishable or toxic residue. Testing according to ASTM D6400-00 criteria should be used to designate compostable plastics.

*“Composting”* means the accelerated biological decomposition of organic matter under managed aerobic conditions resulting in a stable, innocuous final product.

*“Composting facility”* means all related receiving, processing, production, curing, and storage areas and necessary roads, buildings, equipment, litter control devices, pollution control devices, fire control devices, landscaping, gates, personnel and maintenance facilities, sewer and water lines, and process water.

*“Compost leachate”* means a liquid that has percolated through or drained from compost.

*“Compost maturity,”* according to Test Methods for the Examination of Composting and Compost (TMECC), means an organo-chemical state of compost that indicates the presence or lack of organic phytotoxic chemicals in stable compost. Measurements for maturity are based on the amount of volatile fatty acids present. Mature compost will have fatty acids of no more than 2 mg/g dry weight solids or as specified in the most recent version of TMECC.

*“Compost stability,”* according to TMECC, means a stage in the composting process when microbial activity is diminished with the corresponding decrease of available organic carbon and other energy sources. Stability is measured through respiration. Stable compost will have oxygen uptake rates in the range of 0-3.5 mg O<sub>2</sub>/g BVS/hr. or as specified in the most recent version of TMECC.

*“Cured compost”* means compost that is both stable and mature according to the definitions found in this chapter.

*“Curing”* means a process in which compost is further monitored to control pathogen regrowth while increasing stability and maturity.

*“Finished compost”* means cured and, if necessary, screened or refined.

*“Household organic waste”* means general household compostable items such as food residuals and paper produced on premises.

*“Infectious waste”* means waste that is infectious, including but not limited to contaminated sharps, cultures, and stocks of infectious agents, blood and blood products, pathological waste, and contaminated animal carcasses from hospitals or research laboratories.

*“Municipality”* means any city or county in the state.

*“Nuisance”* means whatever is injurious to health, indecent, or unreasonably offensive to the senses, or an obstruction to the free use of property, so as essentially to unreasonably interfere with the comfortable enjoyment of life or property, and a civil action by ordinary proceedings may be brought to enjoin and abate the same and to recover damages sustained on account thereof.

*“Organic materials”* means any material of animal or plant origin.

*“Premises”* means a geographically contiguous property owned by a generator or noncontiguous property owned by a generator and that is connected by a controlled right-of-way to which the public does not have access. Two or more pieces of property that are geographically contiguous and divided by public or private right-of-way are a single premises.

*“Small compost facilities”* means facilities meeting the requirements set forth in rule 105.5(455B,455D).

*“Solid waste composting”* means the composting of any organic material with or without yard waste. For the purposes of this chapter, facilities exempt under 105.2(455B,455D) are not considered solid waste composting facilities. In addition, facilities in compliance with 105.4(455B,455D), 105.5(455B,455D) or 105.6(455B,455D) are not considered solid waste composting facilities. Only facilities that are required to obtain or have a permit are considered solid waste composting facilities.

*“Vector”* means a carrier organism that is capable of transmitting a pathogen from one organism to another. Vectors include, but are not limited to, birds, rats and other rodents, and insects.

*“Yard waste”* means vegetative matter such as grass clippings, leaves, garden waste, brush and trees, and any clean wood waste which is necessary as bulking agent and which is free of coatings and preservatives.

**105.1(2)** There are three different levels of compost facility regulation:

- a. Exempt operations in accordance with 105.2(455B,455D).
- b. Permit by rule. Yard waste composting facilities are exempt from permitting if operated in conformance with 105.3(455B,455D) and 105.4(455B,455D). Facilities that compost dead farm animals are exempt from permitting if operated in conformance with 105.3(455B,455D) and 105.6(455B,455D). Small quantity solid waste compost operations as defined in 105.5(455B,455D) are exempt from permitting if operated in conformance with 105.3(455B,455D) and 105.5(455B,455D).
- c. Solid waste composting. Solid waste composting facilities must obtain a permit from the department. Solid waste composting facilities involving municipal sewage sludge shall also operate in conformance with 567—Chapter 67.

**105.1(3)** Burial of yard waste at a sanitary landfill is prohibited. Acceptance of yard waste by a hauling firm or at a transfer station for burial at a sanitary landfill is also prohibited. However, yard waste that has been separated at its source from other solid waste may be accepted by a sanitary landfill for the purposes of soil conditioning or composting. Yard waste accepted by a sanitary landfill for the purposes of soil conditioning shall be used only on finished areas of the landfill that have received the final earthen cover, developed areas with intermediate cover, and restoration of soil borrow areas. Burning of yard waste at a sanitary disposal project is prohibited.

**105.1(4)** Each city and county shall, by ordinance, require persons within the city or county to separate yard waste from other solid waste generated. Municipalities which provide for collection of solid waste shall also provide for separate collection of yard waste.

**105.1(5)** Land application of yard waste shall be in conformance with 567—Chapter 121.

**567—105.2(455B,455D) Exemptions.** The following projects are exempt from this chapter. This exemption is not a defense to a nuisance action brought pursuant to Iowa Code chapter 657.

**105.2(1)** Yard waste or household organic waste composted and used on the same premises where it originated.

**105.2(2)** Composting facilities involving agricultural waste, excluding dead animals, and clean wood waste which is necessary as bulking agent and which is free of coatings and preservatives. Use of any other materials as bulking agent shall require prior approval by the department. If agricultural waste is mixed with other wastes including dead animals for the purpose of composting, then this chapter shall apply unless the other wastes have been preapproved by the department as necessary as bulking agent.

**105.2(3)** Yard waste, household organic waste, and agricultural waste generated, composted together in any combination and used on the same premises where they originated.

**567—105.3(455B,455D) General requirements for all composting facilities not exempt pursuant to 105.2(455B,455D).** This rule applies to all composting facilities not exempt under 105.2(455B,455D). Facilities exempt from permitting that do not operate in accordance with this chapter may as a result be required to obtain a solid waste composting permit. Composting facilities shall also operate in accordance with all applicable city and county ordinance and permitting requirements.

**105.3(1)** The composting facility shall be 500 feet from any existing inhabited residence, not including the residence of the person owning/operating the compost facility, at the time the permit application was received by the department. Composting must be done outside of wetlands, at least 200 feet from public wells, 100 feet from private wells, 50 feet from property lines, and 100 feet from flowing or intermittent streams, lakes, or ponds. Composting done inside the 100-year flood plain shall be in accordance with all local and department regulations including 567—71.5(455B). Sediment ponds, engineered wetlands or other constructed waterways for the purpose of pollution control are excluded from this requirement.

**105.3(2)** Composting shall be performed in a manner that minimizes the formation of compost leachate by the facility.

**105.3(3)** Measures shall be taken to prevent water from running onto the facility from adjacent land and to prevent compost leachate and runoff from leaving the composting facility. Runoff from the composting facility must be properly managed.

**105.3(4)** Facilities shall be designed, constructed, and maintained so as to minimize ponding of water or liquids. Any ponding that does occur shall be corrected through routine facility maintenance within 48 hours after the termination of the event causing the ponding.

**105.3(5)** Composting must be done on an all-weather surface of compacted soil, compacted granular aggregates, asphalt, concrete or similar relatively impermeable material that will permit accessibility during periods of inclement weather and prevent contamination of surface water and groundwater.

**105.3(6)** Solid waste which cannot be composted or which is removed during processing shall be properly disposed of. Infectious waste shall not be accepted for composting at any composting facility unless approved by the department in writing.

**105.3(7)** Solid waste materials shall be managed through the entire process in accordance with best management practices to minimize conditions such as odors, dust, noise, litter and vectors which may create nuisance conditions or a public health hazard.

**105.3(8)** Storage of cured or finished compost shall be limited to 18 months. The 18-month period may be extended with prior written approval from the department.

**105.3(9)** If compost is offered for sale as a soil conditioner or fertilizer, the compost must be registered by the department of agriculture and land stewardship under Iowa Code chapter 200, Fertilizers and Soil Conditioners. Sale shall be in compliance with all applicable federal and state laws and local ordinances and regulations.

**105.3(10)** Compost shall not be applied to land, sold or given away unless the concentration of human-made inert materials such as glass, metal, and plastic is less than 1.5 percent by dry weight.

Compost shall not be applied to land, sold or given away unless the size of any human-made inert materials is less than 13 mm (0.512 inches).

**567—105.4(455B,455D) Specific requirements for yard waste composting facilities.** Yard waste composting facility operators are encouraged to be trained, tested, and certified by a department-approved certification program upon approval of such a program by the department.

**105.4(1)** Before the composting facility commences operation, the department and the field office of the department serving the composting facility's location shall be notified in writing of the following:

- a. The location of the composting facility.
- b. Legal description of the facility.
- c. Landowner's name, telephone number, and mailing address.
- d. Responsible party's name, telephone number, and mailing address.
- e. Annual capacity of the facility.
- f. Method of composting to be employed.
- g. Source of the yard waste and any necessary bulking agent. This description must include a description of service area defined in terms of municipalities wherein sources of the material are located.

**105.4(2)** The facility shall have a permanent sign posted at the entrance specifying:

- a. Name of operation.
- b. Operating hours.
- c. Materials which are accepted or the statement "All materials must have prior approval."
- d. Telephone number of 24-hour emergency contact person.

**105.4(3)** The area of the composting facility must be large enough for the volume of yard waste composted.

**105.4(4)** Yard waste must be taken out of containers before composting, unless the containers are compostable.

**105.4(5)** Aerobic conditions shall be maintained in accordance with best management practices.

**105.4(6)** An annual report for the previous fiscal year beginning July 1 and ending June 30 shall be submitted to the department by July 31 of each year. The report shall be submitted using Form 542-3276C, provided by the department, and all applicable sections of the form must be completed.

These records shall be maintained by the facility for a period of three years for inspection and evaluation by the department.

**567—105.5(455B,455D) Small composting facilities receiving off-premises materials.** Small composting facilities are exempt from obtaining a solid waste composting permit provided the facility complies with 105.3(455B,455D) and 105.5(455B,455D).

**105.5(1) Acceptable materials and amounts.** Yard waste and food residuals may be received from off premises at a total rate of two tons or less per week for composting either singly, in combination, or with agricultural waste. Any clean wood waste free of coating and preservatives may be used as a bulking agent. The two tons per week combined weight limit does not apply to bulking agent. However, the amount of bulking agent received must be appropriate for the amount of compostable materials received. Facilities composting over two tons of food residuals and yard waste per week in any combination from off premises must obtain a permit (Form 50A (542-1542A)) and adhere to the solid waste composting requirements stipulated in 105.7(455B,455D) through 105.14(455B,455D). If only agricultural wastes are collected and composted, this rule does not apply. If only yard wastes are collected and composted, this rule does not apply.

**105.5(2) Notification.** Before the composting facility commences operation, the department and the field office of the department serving the composting facility's location shall be notified in writing of the following:

- a. The location of the composting facility.
- b. Legal description of the facility.
- c. Landowner's name, telephone number, and mailing address.
- d. Responsible party's name, telephone number, and mailing address.
- e. Annual capacity of the facility.
- f. Method of composting to be employed.
- g. Source of the feedstock and any necessary bulking agent. This description must include a description of service area defined in terms of municipalities wherein sources of the material are located.

**105.5(3) Signage.** The facility shall have a permanent sign posted at the entrance specifying:

- a. Name of operation.
- b. Operating hours.
- c. Materials which are accepted or the statement "All materials must have prior approval."
- d. Telephone number of 24-hour emergency contact person.

**105.5(4) Reporting.** An annual report for the previous fiscal year beginning July 1 and ending June 30 shall be submitted to the department by July 31 of each year. The report shall be submitted using Form 542-3276C, provided by the department, and all applicable sections of the form must be completed.

These records shall be maintained by the facility for a period of three years for evaluation by the department.

**567—105.6(455B,455D) Specific requirements for composting of dead farm animals.** Operators of dead farm animal composting facilities are encouraged to be trained, tested, and certified by a department-approved certification program upon approval of such a program by the department. A facility that composts dead farm animals is exempt from permitting if the following operating requirements are met and the facility is in compliance with 105.3(455B,455D). Businesses or individuals that are neither the owner nor operator of any of the sites where dead farm animals are generated and that want to compost dead farm animals must obtain a permit in accordance with 567—105.8(455B,455D).

**105.6(1)** Before commencing operation, the operator is encouraged to notify the department field office with jurisdiction over the facility. The department may provide general assistance, such as locating bulking agents and providing advice in regard to siting considerations such as pad location, sizing and design, to facilities notifying the department and requesting assistance.

**105.6(2)** Farm animals known or suspected to have died from an infectious disease that can be spread by scavengers or insects or that died from a reportable disease shall be disposed of in accordance with the requirements of the Iowa department of agriculture and land stewardship and the department.

**105.6(3)** Transportation vehicles shall be constructed to prevent the release of mortality contaminated materials under normal operating conditions. The most direct haul route that avoids biosecurity risks shall be utilized.

**105.6(4)** The composting facility shall be designed to accommodate at least the average annual death loss for all sites using the composting facility. Facility design shall also take into account space requirements for managing raw materials (e.g., additional bedding and bulking agents needed for mortality composting) and finished compost.

**105.6(5)** Animal mortalities from a catastrophic event, such as a fire or electrical outage, shall not be composted until the department field office is contacted and arrangements are approved for the appropriate treatment or disposal of the animals. The facility shall contact the department field office with jurisdiction over the facility as soon as possible after such a catastrophic event occurs to receive approval of the disposal option.

**105.6(6)** Dead farm animals shall be incorporated into the composting process within 24 hours of death. An adequate base layer (from 12 to 24 inches thick, depending on the size and number of dead farm animals) with 6 to 12 inches of bulking agent between carcasses and an additional 12 inches of cover material shall be maintained around carcasses at all times to control mortality leachate and odors and to prevent access by scavenging domestic and wild animals.

**105.6(7)** Dead farm animals shall not be removed from composting until all soft tissue is fully decomposed.

**105.6(8)** Compost (including bones that have not fully decomposed) shall be applied to cropland in a manner that minimizes the runoff into a water of the state. Application of the compost to lands other than cropland shall require prior approval by the department.

**567—105.7(455B,455D) Permit requirements for solid waste composting facilities.**

**105.7(1) *Permit required.*** Solid waste composting facilities shall not be constructed or operated without a permit from the department. As part of the sanitary disposal project permit issuance procedures, these facilities must meet comprehensive planning requirements. Since these facilities serve as alternatives to landfilling, comprehensive planning requirements are minimal and are satisfied through the information provided in the permit application submittal and by compliance with the reporting requirements set forth in 105.12(455B,455D). If a solid waste composting facility is formally part of a planning area's integrated waste management system, the operator must participate in that area's planning activities and the facility must be included in all plan submittal documents. The issuance of a permit by the department in no way relieves the applicant of the responsibility of complying with all other local, state, or federal statutes, ordinances, and rules or other requirements applicable to the construction and operation of a solid waste composting facility.

**105.7(2) *Construction and operation.*** All solid waste composting facilities shall be constructed and operated according to the plans and specifications as approved by the department and the conditions of the permit. The approved plans and specifications shall constitute a term of the permit.

**105.7(3) *Transfer of title and permit.*** If title to a solid waste composting facility is transferred, then the department shall transfer the permit within 60 days if the department finds that the following requirements have been met:

*a.* The title transferee has applied in writing to the department within 30 days of the transfer of title to request a transfer of the permit.

*b.* The permitted facility is in compliance with the rules and conditions of the permit.

**105.7(4) *Permit conditions.*** Any permit may be issued subject to conditions specified in writing by the department that are necessary to ensure that the sanitary disposal project can be constructed and operated in compliance with Iowa Code chapters 455B and 455D and these rules.

**105.7(5) *Effect of revocation.*** If a permit held by any public or private agency for a solid waste composting facility is revoked by the director, then no new permit shall be issued to that agency for that sanitary disposal project for a period of one year from the date of revocation. This subrule shall not prohibit the issuance of a permit for the sanitary disposal project to another public or private agency.

**105.7(6) *Inspection prior to commencing operation.*** The department shall be notified 30 days prior to scheduled completion of a solid waste composting facility and when the construction has been completed. The department shall then complete an inspection of the facility to determine if the sanitary disposal project has been constructed in accordance with the plans and specifications and permit requirements. No solid waste shall be accepted by the facility until it has been inspected and approved by the department.

**105.7(7) *Duration and renewal of permits.*** Solid waste composting facility permits shall be issued for a period of three years, and are renewable for similar terms, unless otherwise specified pursuant to 105.7(5).

**105.7(8) Request for and approval of permit renewal.** Requests for permit renewals shall be in writing and must be filed at least 90 days before the expiration of the current permit and submitted on a Form 50A to the department. The department may request that additional information be submitted for review in order to make a permit renewal decision. Comprehensive plan update requirements are satisfied through the information provided in the permit renewal application submittal and by compliance with the reporting requirements set forth in 105.12(455B,455D). If a solid waste composting facility is formally part of a planning area's integrated waste management system, the operator must participate in that area's plan update submittals. The department shall renew the permit if, after a review and inspection of the facility and its compliance history, the department finds that the facility is in compliance with its current permit and these rules. If the facility is found not to be in compliance with its current permit and these rules, then the sanitary disposal project shall be brought into compliance, or placed on a compliance schedule approved by the department, before the permit is renewed pursuant to 105.7(5).

**105.7(9) Facility expansion.** Prior to the facility's expanding the amount or types of materials accepted, the facility shall make a request in writing and obtain approval from the department for an amendment to the permit.

**105.7(10) Process change.** Prior to a change in the facility's process, the facility shall make a request in writing and obtain approval from the department for an amendment to the permit.

**567—105.8(455B,455D) Permit application requirements for solid waste composting facilities.**

**105.8(1)** A permit application for a new facility shall include a completed Form 50A (542-1542A) and a map or aerial photograph. This map or aerial photograph shall identify:

- a. The boundaries of the facility.
- b. Wells, streams, creeks, rivers, ponds, sinkholes, and drainage wells.
- c. North or other principal compass points.
- d. Zoning and land use within one-half mile of the closest portion of the facility.
- e. Haul routes to and from the facility with load limits or other restrictions.
- f. Homes and buildings within one-half mile of the closest portion of the facility.
- g. Section lines or other legal boundaries.
- h. Any nearby runway used or planned to be used by turbojet or piston-type aircraft at FAA-certified airports.

**105.8(2) Design requirements.** Design documents must be prepared by an Iowa-licensed professional engineer (Iowa Code chapter 542B) and must include the following:

- a. Equipment to be installed, litter control devices, pollution control devices, fire control devices, landscaping, gates, personnel and maintenance facilities, sewer and water lines, and process water, and dimensions, details, and capacities of the proposed receiving, processing, production, curing, and storage areas.
- b. Design calculations justifying the size of the composting areas. The areas for composting must be adequate for the volume of solid waste being composted in accordance with best management practices.
- c. Descriptions, specifications, and capacities of proposed equipment to be used in composting.
- d. Flow diagram of all operating steps.
- e. Composition of the operating surface. Receiving, processing, production, and curing must take place on a constructed, impervious base that can support the load of the equipment used under all weather conditions. The permeability coefficient of the base must be less than  $1 \times 10^{-7}$  cm/sec (0.00028 feet/day). Storage areas for cured/finished compost must permit accessibility during periods of inclement weather.
- f. Dimensions, details, and capacities of storm water run-on and runoff management systems of the composting facility. The facility may need a storm water permit.
- g. Proof of the applicant's ownership of the site and legal entitlement to use the site as a composting facility.

**105.8(3)** The operating plan shall provide the following:

- a. Method of composting.
- b. Duration of composting with a time frame for receiving, processing, production, curing, and storage.
- c. Description of storage of raw materials including quantity and types.
- d. Description of the types, amounts, and sources of wastes to be received and processed daily. This description must include a description of service area defined in terms of municipalities wherein sources of the material are located.
- e. Description of the aeration method and the aeration frequency to be used to maintain aerobic conditions in accordance with best management practices.
- f. Description of the methods to minimize and manage odors, dust, vectors, noise and litter.
- g. Description of the specific procedures to be followed in case of equipment breakdown, maintenance downtime, and fire in equipment, composting material or buildings to include methods to be used to remove or dispose of accumulated waste and burned or damaged material.
- h. Plans for using or marketing the finished compost.
- i. Method(s) of disposing of collected storm water.
- j. Method(s) of maintaining storm water management systems to maintain design volume and to locate and repair leaks in the system.
- k. Description of the monitoring, sampling, and analysis procedures and schedule for testing the composting process and product including sampling frequency, sample size and number, and sample locations. A facility-specific time-temperature monitoring plan for pathogen kill shall be included in the operating plan.

**567—105.9(455B,455D) Specific operating requirements for permitted solid waste composting facilities.** In addition to the following, all permitted solid waste composting facilities shall comply with 105.3(455B,455D).

**105.9(1)** Access.

- a. Access to the facility shall be restricted with a lockable gate at the entrance to the facility.
- b. Access to the facility shall be allowed only when an employee, agent or representative of the facility is on duty.
- c. Emergency access to the facility shall be provided. Fire lanes shall be maintained to provide access for firefighting equipment as required by the local fire department.

**105.9(2)** The facility shall have a permanent sign posted at the entrance specifying:

- a. Name of operation.
- b. Operating hours.
- c. Materials which are accepted or the statement "All materials must have prior approval."
- d. Telephone number of 24-hour emergency contact person.

**105.9(3)** All materials received must be incorporated into the composting process within 24 hours of receipt unless storage of these materials is specified in the plan and approved by the department.

**105.9(4)** Sample collection, preservation, and analysis must be done in a manner which ensures valid and representative results. Facilities should follow the most recent version of the Test Methods for the Examination of Composting and Compost guidelines or other testing procedures as approved by the department. Unless otherwise proposed in the operating plan and authorized in the permit, the permit holder shall test at a minimum:

- a. Twice weekly temperature readings of compost piles, batches, and windrows. Compost must be held at a temperature above 55 degrees Celsius (131 degrees Fahrenheit) for an appropriate amount of time, in accordance with best management practices, in order to achieve pathogen reduction.
- b. Weekly moisture levels of compost piles, batches, and windrows.

c. Testing of the finished product. Compost shall not be applied to land, sold or given away for household use unless the following requirements are met. If the following requirements are not met, compost must be applied according to 567—Chapter 121.

(1) The density of fecal coliform shall be less than 1000 most probable number (MPN) per gram of total solids (dry weight basis) or the density of *Salmonella* sp. bacteria in compost shall be less than three MPN per four grams of total solids (dry weight basis).

(2) The concentrations of human-made inert materials comply with 105.3(10), and the concentrations of all metals are less than the following:

| Metal         | Concentration mg/kg dry weight |
|---------------|--------------------------------|
| Arsenic (As)  | 41                             |
| Cadmium (Cd)  | 39                             |
| Copper (Cu)   | 1500                           |
| Lead (Pb)     | 300                            |
| Mercury (Hg)  | 17                             |
| Nickel (Ni)   | 420                            |
| Selenium (Se) | 36                             |
| Zinc (Zn)     | 2800                           |

**567—105.10(455B,455D) Operator certification for permitted solid waste composting facilities.**

All permitted solid waste composting facilities shall meet the following requirement. The person responsible for daily operation of the facility shall be certified by a department-approved program upon approval of such a program by the department. The certification must be renewed every three years.

**567—105.11(455B,455D) Record-keeping requirements for solid waste composting facilities.**

All permitted solid waste composting facilities shall meet the following requirements. The following records shall be maintained by the facility for a period of three years and at the facility at all times and shall be submitted to the department upon request:

1. Analytical results described in 105.9(4). These results shall be recorded on a department-approved reporting form.
2. Types and weight of compostable materials and bulking agent, in tons, accepted at the facility annually.
3. Weight of compost, in tons, removed from the facility annually.
4. A copy of the plan, the permit, annual reports, and the current storm water pollution prevention plan.

**567—105.12(455B,455D) Reporting requirements for solid waste composting facilities.**

An annual report for the previous fiscal year beginning July 1 and ending June 30 shall be submitted to the department by July 31 of each year by all permitted solid waste composting facilities. The report shall be submitted using Form 542-3276C, provided by the department, and all applicable sections of the form must be completed.

**567—105.13(455B,455D) Closure requirements for solid waste composting facilities.**

All permitted solid waste composting facilities shall meet the following requirements. For each composting facility, a closure plan shall be submitted to the department containing a description of the steps necessary to close the facility. A permit shall not be issued unless the closure plan is approved.

**105.13(1)** An updated closure plan, including a schedule for closure, shall be submitted to the department at least 60 calendar days prior to the proposed termination date for the facility.

**105.13(2)** Unless an alternative schedule is approved by the department, within six months of the facility's ceasing operation, all waste and unfinished and finished compost shall be removed from the premises.

**105.13(3)** Facilities beneficially reusing material in order to comply with 105.13(2) are required to submit in written form all agreements for this reuse. This beneficial reuse shall include names of parties involved, amount of material utilized, and cost per ton. The closure plan will not be approved until these agreements are submitted to and approved by the department. The department shall also be notified of any changes in the agreements.

**105.13(4)** Upon closure, all permitted solid waste composting facilities shall perform the following activities:

- a. Properly dispose of all organic material, solid waste and litter at the premises.
- b. Lock all doors, gates, entrances, and exits.
- c. Report the completion of these activities to the local political jurisdiction, the department, and the department field office serving the composting facility.

**567—105.14(455B,455D) Composting facility financial assurance.** The holder of a permit for a composting facility receiving over 5,000 tons of feedstock annually, bulking agent excluded, shall maintain a closure account for financial assurance. The account shall be specific to a particular facility.

**105.14(1) Definitions.** For the purpose of this rule, the following definitions shall apply:

- a. "Account" means a formal set of separate records.
- b. "Current cost estimate" means the cost estimate for 105.14(2), prepared and submitted to the department at the time of application for a new composting facility permit and with each permit renewal thereafter by an Iowa-licensed professional engineer or other professional as approved by the department.

**105.14(2) Current cost estimate.** The current cost estimate shall be based upon the following factors:

- a. Transportation costs, which include the cost to load the material, and total tip fees to properly dispose of the maximum tonnage of received materials that could be managed and stockpiled by the compost facility. Also included shall be the costs of properly removing any wastewater held at the facility, or
- b. Cost of approved beneficial reuse option, approved pursuant to 105.13(3), for the total amount of material that could be managed and stockpiled by the composting facility. If the total amount of material will not be beneficially reused, the remainder of the cost shall be calculated according to 105.14(2) "a." Also included shall be the costs of properly removing any wastewater held at the facility.

**105.14(3) Closure account.**

- a. *Nonassignment of funds.* Money in the account shall not be assigned for the benefit of creditors except the state of Iowa.
- b. *Final judgments.* Money in an account shall not be used to pay any final judgment against a permit holder arising out of the ownership or operation of the facility during its active life or closure.
- c. *Withdrawal of funds.* Money in the account may be withdrawn without departmental approval only for the purpose of funding closure activities, including partial closure, that are in conformance with the closure requirements for composting facilities. Withdrawals for activities not in conformance with a closure requirement must receive prior written approval from the department.
- d. *Excess funds.* If the balance of a closure account exceeds the current cost estimate for closure at any time, then the permit holder may withdraw the excess funds so long as the withdrawal does not cause the balance to be reduced below the amount of the current cost estimate.

*e. Initial proof of establishment of account and funds.* Proof of the establishment of the account and its compliance with this subrule shall be submitted to the department within 30 days of the close of the permit holder's first fiscal year that begins after June 19, 2002, or at the time of application for a permit for a new composting facility.

*f. Deposits.* Deposits into the closure account shall be made on an annual basis for a period of ten years, in the amount specified in this subrule, beginning with the start of the permit holder's first fiscal year that begins after June 19, 2002. The deposits shall be made within 30 days of the close of the permit holder's fiscal year. The minimum annual deposit to the closure account shall be determined using the following formula:

$$\frac{\text{CE} - \text{CB}}{\text{Y}} = \text{annual deposit to closure account}$$

"CE" means the current cost estimate of closure costs, as applicable.

"CB" means the current balance of the closure account, as applicable.

"Y" means the number of years remaining in the ten-year pay-in period.

*g. Investment of funds.* Funds held in the account established by this subrule may be invested only in instruments listed in Iowa Code section 12B.10(5).

*h. Access to funds by the department.* The department shall have full rights of access to all funds existing in a facility's closure account, at the sole discretion of the department, if the permit holder fails to undertake closure activities after being directed to do so by a final agency action of the department. These funds shall be used only for the purpose of funding closure activities at the facility.

**567—105.15(455B,455D) Variances.** A request for a variance must be submitted in writing to the department pursuant to 561—Chapter 10.

These rules are intended to implement Iowa Code sections 455B.304 and 455D.9.

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